

# California GARDEN

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OCT.-NOV.

Vol. 54, No. 5

1963

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# CALIFORNIA GARDEN

OCTOBER-NOVEMBER, 1963  
VOLUME 54 NO. 5

## Remember your October-November garden chores

Living in a land of evergreens, this fall season does not mark the beginning of a long, bleak, dismal season as it does in other parts of the country. Although we may have a deciduous plant or tree in our garden — usually well-hidden as though we were traitors to the land of perpetual sunshine — the art of gardening here is to have all plants look well at all times of the year.

What this or that particular plant requires is the basic question to be considered before planting; success or failure depend on how well you succeed in meeting their simple requirements.

Getting down to work, we start hunting for catalogs which grow more scarce each year. There is a reason for this, a written description is regarded as the most accurate description of the plant's performance. Shop around and you will find the same plant is tall, short, creeping and in cases of single flowering varieties two are planted together for double flowers.

### FOLLOW TIMETABLE

Whether you realize it or not, seasons are as definite here as in other areas, the change is not as abrupt, nevertheless we must follow nature's built-in timetable if we are to plant and harvest fruit and flowers. This only requires the study of growing time, the flowering time with normal weather conditions. Growers know off-season planting is strictly a gamble.

In the past few years warm winters proved to be ideal for both fruit and flower production, boosting the value of agricultural products to new heights. With the ranks of gardeners increasing daily, the landscape architects are introducing new materials and methods to fit the new home owner's needs. The trend today is low maintenance landscaping.

To be truly effective the plants used must be specimen plants, each must be a distinctive part of the total project.

### UNUSUAL MAGNOLIA

Constantly seeking the unusual, we find a new Magnolia tree with leaves resembling the rubber tree, which will be available along with the improved varieties of Liquidambar, Ginkgo, Maples and many more new introductions. Those beautiful plants which seem to be close to the roadside, always first and plentiful with just the exact autumn colors should be avoided, as poison oak and ivy, protected by law, inflict their own penalty. Colder locations you will notice produce the brightest colors in Autumn foliage.

The liquidambars are ready to display the fall coloration, all deciduous trees and shrubs add to the season. Some evergreens, Nandina is a good example, changing from green to red, brightening the fall months, plus fine red berries.

A new rhizomatous arrival is the bearded Iris "Cloud Clap," a huge pink whose 7 to 9 inch blooms top all Iris in flower size.

Bulbs, of course, predominate, Anemone, Ranunculus, Sparaxis, Dutch Iris, Freesias, Crocus, Daffodils, Hyacinth, Gladiolus, Lily bulbs can now be found in all garden stores.

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## CALIFORNIA GARDEN

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Co-Chairmen: Jean Kenneally, Vera Thacher  
Editor ..... Don West  
Assistant editor..... Alice M. Clark  
Advertising..... Joan Betts, Alice M. Clark  
Office Manager..... Rosalie F. Garcia

### CONTRIBUTING EDITORS

|                     |                 |
|---------------------|-----------------|
| Dorothy S. Behrends | Cleaves Hardin  |
| Helen D. Carswell   | Foster Parrent  |
| Alice W. Heyneman   | Clive Pillsbury |
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## *garden chores . . .*

Bargain bulbs never produce as well as quality varieties. Choose clean, plump, solid bulbs and with good soil preparation, you can expect a rewarding display of bloom.

The September showers should not be considered sufficient to stop watering.

Bedding plants can be set out for fall and spring bloom. Lobelia, Pansies, Violas, Alyssum are colorful ground covers. Stock, Snapdragon, Calendula, Cinerarias, Primroses are available now. For those who prefer growing from seed you will find many varieties not grown commercially. Various reasons are given why they are not grown, the principle reason seems to be difficulty in transplanting, Bells of Ireland, Salpiglossis are good examples. Vegetables thrive in cool weather, all root crops, lettuce, celery, cabbage, cauliflower, broccoli, peas. With very little insect activity only a minimum amount of care is needed.

### FIRST BARE ROOT

The first of the dormant or bare root plants will be available, strawberries, artichokes, rhubarb, berries, asparagus, these will be followed by roses, fruit and shade trees.

This is the cleanup season, dormant sprays can be applied to eliminate overwintering insects and fungus. Winter mulch will improve the summer baked soil, problem soils will be improved by soil conditioners applied now, the winter rains will penetrate deeper.

*The San Diego chapter of the American Iris Society was organized July 18, 1963 with Mrs. Brooks Lawson, of Valley Center, as president.*

*Meetings will be held each month on the third Sunday at 2:30 p.m. in the San Diego Floral Association Building, in Balboa Park.*

*Mrs. N. R. Carrington is representative to the Floral Association and can be reached by telephone at 453-3383.*

*She will accept new memberships. Each new member will receive a \$10 iris root until membership is closed.*

## 50 YEARS AGO in CALIFORNIA GARDEN

### THE INTRINSIC VALUE OF BEAUTY

Why is it that the average man is slow to grasp the fact that beauty is a great asset? He weighs the cost and is loathe to spend a dollar is beautifying his belongings, failing to realize that he is getting back dollars for dimes. He goes into a grocery store and buys prunes for fifteen cents a pound that have cost some "processor" six cents, simply because they have been dyed black and subjected to a coat of glucose which makes them shiny. They are more pleasing to the eye and our friend is paying for beauty. He goes into one restaurant in preference to another because the surroundings are more artistic. He pays 15 cents for a couple of chops in a cheap cafe, served any old way, on a thick dish, but prefers paying fifty cents for the same chops daintily served on a delicate platter garnished with parsley and a slice of lemon. He may run a candy store and realize that a lot of neat, attractive waitresses will draw more patronage than a lot of homely, slovenly ones, yet at the same time he will enter a protest against tree planting in his block because he is going to be assessed to pay for the same.

Our average law makers will spend thousands of dollars for salaries and expenditures for which we have nothing to show the following year, but he begrudges the few cents tax levy for park purposes. The people of San Diego, by a most decisive vote, declared that they wanted trees planted and cared for, yet our city fathers are too busy with the spiritual uplifting of the city to give any heed to the beautifying of our streets though the money does not come out of the treasury. We have no time to lose if we would have a "City Beautiful" in time for our 1915 visitors.

\* \* \*

Now I come to think of it, I never met a noisy gardener that is a real gardener.

\* \* \*

Knowing the light, not to say frivolous, character of the soil at Ocean Beach, Mr. Campbell was asked to give his formula to produce such floral wonders, and he replied, "Six tons of manure from the grading camp in one year." Think of that you gardeners who carry your fertilizer in paper bags. This six tons went on part of a fifty foot lot.

Alfred D. Robinson



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# California Garden

OCTOBER-NOVEMBER, 1963

## *Rachel Rachel I've been thinkin'*

By Frank Quintana

IT IS high time that some one answered Rachel Carson's "*SILENT SPRING*." This stimulating book has certainly enjoyed the attention of just about every other medium of opinion expression. Besides, as a professional chemist, I find the book a vastly overrated and irritating tract.

For those who need an introduction, Miss Carson is a biologist-turned-author who achieved international prominence with the publishing of "*The Sea Around Us*." The respect she earned as a result of this effort was well-deserved for she had rendered an immense body of information into an eminently enjoyable (and readable) exposition. As an encore, she produced "*The Edge of The Sea*" under a Guggenheim Fellowship. This was first serialized in *Life* magazine, and subsequently published in book form. To the best of my recollection, no moral preachments are contained therein.

"*SILENT SPRING*" is very much another story. This is an out-and-out damnation of the pesticide industry and an indictment of insect pest eradication practice.

The complaint is many-pronged, and is reinforced not only by carefully selected negative documentation, but by the writer's craftsmanship and ability to condemn by implication, innuendo and fear-creation. The appearance of the book generated a splendid whirl of controversy which reached into the highest levels of our government, preempted several hours of national television time, brought cries of "Foul" from segments of the chemical industry and shouts of glee from quacks who deal in phoney foods and health nostrums, rallied the troops of the Lunatic Fringe who are against everything anyway, made a basis for Congressmen's speeches, and sold a whale of a lot of books. No writer can ask for more than that. Unless, of course, the writer happens to value a reputation previously earned on good, honest work.

I find Miss Carson's book stimulating, especially of adrenalin. For my part, the value of her message is clouded by her approach to the argument. The single useful thought contained in the book is that insecti-

cides and pesticides ought to be used with wisdom, moderation and caution. She stresses the useful adjunct to this sensible point of view that greater research effort should be expended to develop selective bug-killers, and that every effort should be bent toward expanding the utilization of biological controls wherever possible. The balance of the text is heavily salted with (a) un-semantic evaluations, (b) half-truths and (c) grossly inflated fears, all of which are coldly calculated to terrify the reader into agreement.

(a) She attacks "chemicals" unselectively inferring that ALL chemicals are bad. "Chemicals are the sinister and little recognized partners of radiation in changing the world . . .," and ". . . new chemicals come from our laboratories in an endless stream . . . almost 500 . . . each year to which the bodies of men and animals are required somehow to adapt . . ." I guess it must be tough to adapt to things like Nylon, Orlon, Synthetic Rubber, Polyethylene packaging films, Freon refrigerants, Streptomycin, Cellu-

## WHAT A WONDERFULLY NOISY

lose sponges, and Urethane mattress foams. She goes on to say that "since the mid-1940's over 200 basic chemicals have been created for use in killing . . . organisms described in the vernacular as "pests" . . ." *Point No. 1: The book was published in 1962: 17 years from the mid-1940's. Let's see, 17 x 500=8,500 new chemicals, of which about 200 are insecticides. Thus, 8,300 new chemicals were something other than pesticides, but in Miss Carson's view, were apparently equally evil. Point No. 2: The bit about being "described in the vernacular as "pests" . . . "What is one supposed to call cockroaches, or malaria mosquitoes or wharf rats, Dear Little Friends?*

- (b) Miss Carson ties the apparently dwindling population of eagles to the current use of insecticides, and cites various reports that speculate on this fact. She chooses to ignore a report by Alexander Sprunt, Research Director of the Audubon Society, (1) in which the major cause of loss is attributed to shooting, and lack of nesting success, to predation by animals and to human disturbance. Not only that, but one State has had a bounty of \$1.00 for eagles killed, and in 25 years, 100,000 bald eagles have been destroyed.
- (c) Miss Carson tries to tie cancer and insecticides together. The facts are that no evidence exists which proves that synthetic insecticides have a carcinogenic effect on man. (2).

Aside from the suggestion that older, weaker insecticidal compounds should be used at weakened strengths, chemicals (meaning chemical insecticides) are so roundly denounced in the book that the only logical conclusion is that they should be outlawed and abandoned. To abandon insecticides is to encourage insects. To encourage insects is to invite disease and famine and death.

Solemn experts have calculated that if insecticides were abandoned, 90% of the world's food supply would be lost. This would undoubtedly result in the tumultuous singing of the birds, buzzing of the bees, and leaping of the trout: but with no human ear to listen to the chorus, nor eye to delight

*a chemist takes exception to the implication in Rachel Carson's best-selling book, "The Silent Spring," and cites some theories of his own about the effects of his profession on the health of the world of plants and people*

at the sight, *The Spring Might Just As Well Be Silent*. Biological control sounds peachy, but it is a long way from being promptly and economically available in a general way: in the meantime, what do we do? Whatever their shortcomings, chemical controls are useful, have been effective, and must serve until better ways are perfected.

It is logical to expect that better ways will be perfected, and Miss Carson cites a number of fascinating contributions that have been made along these lines years before her book hit the presses. Not the least of these is the work on eradicating the cattle screwworm fly through the means of sterilizing male flies with X-rays or gamma radiation. Chemical (there's that bad word again) sterilants are also being developed, but in spite of Miss Carson's conviction that the profit-hungry chemical industry rushes to the marketplace, much testing on safety is preceding their release. (And, by way of tying in the profit-allegations, I have not yet heard that Miss Carson is allocating any of her profits on the book to research in any of the areas she so strongly recommends.)

In reciting her litany of the evils of chemicals, Miss Carson repeatedly refers to the remarkable adaptability of the insect to develop immunity to insecticides. It might be of interest to note that one John B. Smith of the New Jersey Agricultural Experiment station reported observing this faculty of insects back in 1897. (3) In 1914 Professor A. L. Melander confirmed the observation in work at

Washington State College, and since that time, development of resistance to insecticides has been an area of continuing study. The development of resistance is in part a function of the countless numbers of individuals in a species: add this to the fact that it is extremely rare that two or more individuals are exactly alike. The survivors of insecticidal attack are likely to have progeny which survive, and they multiply faster than an IBM 707.

Miss Carson postulates that we must therefore always seek more and more deadly materials, which she believes will hasten our own demise. She therefore recommends that biological control in terms of insect-infesting parasites and bacteria be used and developed for use. In the first postulation, she seems to ignore the possibility of attack on the insect pest by chemicals that affect other sites in the insect's metabolism. Secondly, she blithely ignores the possibility that insects may with equal ease develop immunities to bacterial or parasitic disease.

This is especially interesting to note, since when she is dealing with the negative side of the diatribe, she fills the book with Maybees, Could-Bees, Might-Bees, and Certainly-Seem-To-Bees.

She might have considered the plight of the Australians who are plagued with rabbits; they introduced a disease that killed rabbits, and for a time were delighted by the success of the operation. But, there were those that recovered, and eventually sired a race of rabbits that scarcely sneeze at what was once a deadly contagion for the cottontails. In this same argument against chemical insecticides and pro-biological control, she stoutly maintains that even though there is no evidence to demonstrate that insecticides cause no other disease than poisoning, we do not know what effects may obtain on future generations of mankind. A point well taken. Equally, however, while no evidence exists that insecticidal bacteria are harmful to mankind and wildlife, how can it be assumed that future generations will not be harmed by some mutant of the strain, or, the strain itself if a widespread use develops?

If Miss Carson is truly concerned with the death and injury to humans and wildlife, and the poisoning of our

## PLACE THIS OLD WORLD BE-



## *"the inescapable fact is that man ravages nature to survive . . . if he doesn't, he'll join the dinosaurs"*

environment, it seems to me she might better have applied her considerable talent against the automotive industry. Fatalities due to insecticides average 140 per year and the number per year is going down. Automobiles in 1962 were responsible for 40,500 deaths of humans and Heaven knows how many domestic and wild animals. (4) (I'll admit it is hard to kill a fish with a car.) Injuries in 1962 amounted to 3,345,000, and the loss in property, wages and earnings amounted to 15 billion, 500 millions of dollars. And when it comes to polluting the atmosphere, the auto has few peers. Miss Carson makes much ado about the toxicology of the hydrocarbons which are used in conjunction with sprays as a convincer about their total evilness. The amounts of hydrocarbons used in this connection are comparatively small, and human exposure to them is occasional; with the automobile, exposure is a day-in-day-out occurrence. The notoriety of Los Angeles Smog and the pale blue air of New York's man-made canyons surely attest to the pollution of the atmosphere.

What I find most incongruous is the great wonderment and worry about the un-balancing of nature. This eighteenth century idea ought to be given its due in terms of the chronology of ideas of mankind, and reverently put aside. If man is to survive in numbers, and our U.S. population is now a pretty dandy number, he is unequivocally an unbalancer of nature. His appetite, his need for clothing, shelter, recreation and sewage disposal just raise hell with nature when he exists in large numbers. Incidentally, best present estimates are that man is adding to his numbers at the rate of 7,000 per minute on a world-wide basis. Wild areas are delightful things, and studying them yields understandings of marvelous designs for living. But Modern Man (and especially woman, Miss Carson) has changed over the eons of time into a being that cannot survive in this delightful design.

The amount of foodstuffs consumed by man is a number huge enough to be meaningless. The surplus we Americans enjoy is NOT duplicated anywhere else, and it is a tenuous thing. It is normal for surplus to disappear, and it easily could. As for shelter,

Americans used 37.4 BILLION board feet of lumber in 1962, (5) a factor that must surely have unbalanced nature a bit. As for fish, in 1962, 19.4 million people in the 50 states bought one or more sport fishing licenses, (6) and in all probability did more damage to fish populations and wild areas than did insecticide.

While we are on the fish story, let us remark on the insecticide-caddis fly larvae-salmon relationship. This was a telling anecdote, but it is worth mentioning that in 1961, the salmon catch ran to 308,600,000 pounds of salmon, (7) and if that isn't a factor in the natural balance of things, I'll eat Tuna Fish. The inescapable fact is that man ravages nature to survive: if he doesn't his dominance ends, and he will join the dinosaurs.

In this century he has also learned to conserve, and having discovered the benefits of conservation is bending further efforts in that direction. Miss Carson might have balanced her text with some reporting of this effort, but it must be remembered that her treatise is mono-oriented negatively. There is no question in the minds of thoughtful persons that if the balance

of nature is to be restored as advocated by the more vocal anti-chemical, anti-insecticide people, it would assuredly balance much of humanity out of existence.

Miss Carson's concern for fish and game is well founded. What documentation she does provide in her account of the effects of DDD and DDT on aquatic life and related animals provide good reason for the concern to become more widespread.

As a non-hunter and only sometime fisherman, the whole treatise on this subject reminds me of a James Thurber Modern Fable about a hunter who discovers a wolf in the process of carrying off a yearling lamb. The hunter shoots the wolf, rescues the lamb, and taking it home, walks it round to the kitchen without so much as an apology as they pass the mint bed. That night after a fine dinner of chops, the hunter discourses at great length about the evilness of wolves in the world.

Killing is killing, willy-nilly. Miss Carson's view that the wholesale slaughter of these innocent bystanders is thoughtless, unnecessary waste is indisputable, but in a sense is rendered lugubrious by the realization that they should be spared poisoning only to be shot or hooked on a dry fly.

Between Miss Carson and the Organic Gardeners, one would be inclined to believe that Americans are in pretty terrible straits what with all the poisoning of the air, water, foodstuffs and drink. Any visiting Martian who happened to read these various tracts would surely hop into his saucer and beat it out of these unhealthy United States.

Not that it proves anything, but it is interesting to note that in the dear old poisonous U.S.A., an infant has a life expectancy of 70+ years. In India, where it isn't nearly so poisonous, 32 years is all a babe might expect. Mexico, which is still much less poisoned than the U.S., offers 38.5 years average expectation: and Venezuela, possibly because of the presence of a few American Insecticide Squirters, is somewhat better with 46 years being about average. (8) Lest someone else say it first, there may be other factors involved, so UN-like my anti-chemical friends I'll not try to attach any great importance to these figures. I suppose I might also

### REFERENCES:

1. The Audubon Magazine, Jan.-Feb., 1963.
2. "Agricultural Chemicals" published by Manufacturing Chemist's Association, 1963. Library Congress No. 63-14299, pp. 44-45.
3. "Yearbook of Agriculture—1952" p. 317 et seq. prep U.S.D.A.
4. Statistics National Safety Council, provided by Mr. Gene Seltzer, Dist. Safety Counsel, Auto Club of So. Calif.
- 5, 6., Chemical & Engineering News, Feature "Department of Obscure Information" Famous Issues, 1963.
7. Statistical Abstract of U.S.—1962. Information furnished by Research Dept., S. D. Public Library.
8. Data provided by History Division S. D. Public Library.
- 9, 11. Chem. & Eng. News, July 29, 1963. pp. 36 et seq.
10. Time Magazine, July 5, 1963.
11. Life Nature Library "The Insects," pp. 28-29.

mention that in these poisoned acres we call America, the average American spends about 20% of his income for food. In Nigeria, where spray guns are scarcely known, the Nigerian citizen spends 70% of his income for food.(2) Also interesting, Nicht Wahr?

Much of Miss Carson's tract swings on the hinge of DDT, its poisonous character, its possible effects upon mankind now and forevermore, and its seeming prevalence in minute quantities in all our foodstuffs. She has assembled an omnitude of information on this subject, and characteristically she has refined all the information supporting her view into a masterful presentation. One would judge that the act of eating anything is an act of suicide if the whole fabric of the cloth she weaves is truly made. In this area of her speculations, there rages a great debate.

Miss Carson says, "Bad, very bad." Other authorities say not so bad. Miss Carson says CORRECTLY that all foodstuffs now contain small residues of DDT. She then guesses that the DDT stored in human fatty tissue may lead to a variety of disorders ranging from simple poisoning, through liver damage, genetic variation and finally cancer. She also wonders whether explosive damage might result from unknown reactions of stored DDT with other substances and drugs taken into the body. Quien Sabe?

In testimony before the Senate committee holding hearings on this subject, Dr. Wayland J. Hayes, Chief of the Toxicology Section of the U.S. Public Health Service maintains (9) "... there is no conclusive evidence that pesticides, old or new, are a cause of any disease except poisoning." Any effect of repeated exposure to pesticides would be noted most frequently and most severely among persons whose exposure has been long and intensive. These people ordinarily stand exposure to pesticides without inconvenience, he says. For this reason, some doubt is immediately cast upon cases alleged to result from exposure that is trivial he adds. Residues of DDT are found in the fatty tissue of almost all people. Generally, the average amount stored is about 5 parts per million. Agricultural applicators store about three times as much as the usual citizen, and formulators of pesticides may store more than 600 p.p.m. for years without inconvenience. Studies have been made where-in men were fed diets daily that con-

tained DDT at levels 200 times greater than that occurring in the ordinary diet and no detectable clinical effects were observed. The DDT storage level in the average person has not changed (1961-62) from levels observed in 1954-56. The average amount stored has remained about 5 parts per million, suggesting that an equilibrium storage level tends to be established, with larger amounts tending to be excreted.

Dr. Mitchell Zvon, Assistant Health Commissioner of Cincinnati has observed regarding long term bad effects of pesticides, "... there is no evidence that long-term subtle effects exist. None have appeared in the twenty years we have been looking at them."(10)

Dr. Wm. J. Darby, chairman of the department of Biochemistry, Vanderbilt University of Medicine has testified "Persistent pesticides may pose a greater hazard to some wildlife species than do no persistent ones, but if persistent pesticides are arbitrarily eliminated from man's armamentarium against disease, we might well be buying some hoped-for reduction in hazard to wildlife at the cost of a known increase in acute hazard to man."(9)

So goes the argument. Insecticides are dangerous things to have around the house. So are electricity, laxatives, matches, cooking stoves, bathtubs and Christmas Trees. Carelessness with any of these brings pain and the possibility of death. But bear in mind that the lowly housefly makes all these items pale by comparison. As many as 33 million microorganisms may flourish in its guts, and the fly has the disgusting habit of vomiting briefly on anything he chooses to sample. Another 500 million microorganisms may swarm over its dirty body and legs. (11). Spray can, anyone?

I am hopeful that Miss Carson's book will result in several things: that people using insecticides will use them with the care and respect due them as dangerous but generally useful things; that research will be stimulated in the areas of both selective toxicology and in biological control of insect pests: that congressmen, reporters, and people at large will not think it screamingly funny when a scientist announces a plan to study, say, the sex life of the Mediterranean Fruit Fly; and that no hasty legislation is passed, that would promptly throw us to the tender mercies of the vectors carrying malaria, cholera, typhus, yellow fever, encephalitis and Lord knows what else.



THE Koalas in a Gum Tree herald the fourth in the Jerebeg Series of Botanical Tours through different parts of the Zoological Gardens. The first two walks were described a year ago in *California Garden* and the third was in the last issue. Since the Zoological organization is such a "going" concern it is inevitable that some of the plants are moved as the animal housing is improved. Most of them, however, are repeated in other locations.

The author's aim has been to bring the reader the plant story in retrospect, so he may recall the garden setting and realize how rare plants as well as animals from all over the world have found a harmonious home together.

In following this plant tour, note how many palm varieties are used in the landscape. It is a great compliment to the ability of the Horticultural Superintendent, Mr. Tim Aller, that the Zoo has recently been given over a hundred rare palm specimens by Mr. Ed. Moore of Pacific Beach, who grew most of them from seeds collected in his world-wide travels. When these plants are established, the Palm Collection of this Zoological Garden will be second to none in California. It should be a Mecca for Palm Fans — of all kinds!

This Tour follows the east boundary of the Zoo to the Koalas, part way to the Elephants and then past the Camels into the "Small Animal" Canyon. Take the Escalator back up for a glimpse of the new Gorilla Quarters and from there the circle will come round at the exit.



# Plants from Around the World in the SAN DIEGO ZOO

## (Part Four)

By Chauncy I. Jerabek

### San Diego Zoo Photos by R. Van Nostrand

**T**HIS Fourth Zoo Tour will move in a northerly direction. Beginning with the planter beds to the right of the main entrance, note the Bronze New Zealand Flax, *Phormium tenax rubrum*. It is favored for the color of its sword-like leaves rather than for the curious long stalks of reddish, yellow-brown flowers in the spring.

In this area are two Queen Palms, *Arecastrum romanzoffianum*, known locally as Cocos Plumosa. These South American feather-leaved palms are much used for street plantings. Between two of their grayish trunks is an excellent female Sago Palm, *Cycas revoluta*, from the Orient. Borne in a crown at the top of the trunk are stiff pinnate leaves, two to three feet long, that form a circular mound of deep green. Nested at the center, in the tomentose mass of chamois bracts, are unusual red fruits. This decorative plant would be worth around seven hundred dollars in a nursery, and a bargain at that, as it is a slow grower. The border plant is the grayish-white

Cushion Bush, *Caloseppalus brownii*, of Australia. If not sheared, the silvery twigs mound up and are covered in summer with dime-size globular yellow flowers.

In these first two planters are some fine specimen Billbergias, Aechmeas, Vriesias and others, part of a valuable Bromeliad collection donated to the Zoo by Thelma Darling Hodge of Hollywood. All of this family, to which the pineapple also belongs, has attractive foliage, showy bracts and spikes of flowers that are unique in color and form. The September "Zoonooz" carried an article by Tim Aller featuring these plants.

In the plant bed under the restaurant windows is a large clump of Bird-of-Paradise, *Sirelitzia regina*, from South Africa. From grayish-green cannalike leaves come long stiff stems topped by orange and peacock-blue flowers, like the crest of a bird's head. The next shrubs with small bronzy leaves and double red flowers are called Red Damask, a new form of the old Australian Tea Tree, *Leptospermum*

*scoparium*.

Against the foundation is a row of low sturdy shrubs with white and green foliage and olive-green stems known as Italian Buckthorn, *Rhamnus alaternus argenteo-variegata*. Near the edge of the curve there is a young, small-leaved Fan Palm, *Chamaerops humilis*, the only palm native to Europe. The leaves produce a vegetable hair which is carded and shipped away in huge quantities to be used to stuff pillows and cheap mattresses, hence the name, Hair Palm. There is another, larger specimen near the corner that shows yellow flowers and plum-colored seeds. In this planting are a number of varieties of fuchsias and several Pink India Hawthorn, *Raphiolepis indica* var. Springtime, which is covered with apple-blossom pink flower clusters during its blooming season.

In the space between the trunks of three Queen Palms there is a huge plant with broad banana leaves on a trunk swollen at the base. It is the Ethiopian Banana, *Musa ensete*, from Abyssinia. If it is still in flower you will notice that the inflorescence has bracts striped reddish-brown. The flower is followed by inedible black seeds. When these are fully ripe the whole plant dies. The bed is edged with Natal Creeper, *Carissa grandiflora horizontalis*, with glossy prickly foliage and white flowers.

As you walk northward, the two large eucalyptus in the pavement are Sugar Gums, *E. cladocalyx*, from Australia, a variety most commonly used in San Diego. On the right, in the next planting, are three medium-sized trees with leathery dark green leaves and white star-shaped flowers that look like snowflakes. These Brisbane Boxes, *Tristania conferta*, have seed-pods similar to those of eucalyptus, without the seed caps.

Skipping other shrubs in this area let's look at those on the left of the



The Japanese Stone Lantern, symbol of friendship between San Diego and Yokohama is framed here by a Trident Maple, *Acer buergerianum*, with a Fernleaf Bamboo, *Bambusa multiplex*, to the left of the stones. Two types of Juniper ground cover surround the Oriental setting.

right-hand path. On the front corner is *Hibiscus sinensis* var. Crown of Bohemia. It has double burnt-orange flowers. Beside it is *Hibiscus Conqueror*, a single buff-apricot color with a delicate crimson base. It is hard to keep up with the countless new hibiscus types that appear every year. Next are tall specimens of Natal Plum, *Carissa grandiflora*, with the same fine shining foliage, white flowers and red fruits as the prostrate variety. The fruits are edible and sometimes used for jelly. Their sharp thorns discourage trespassing. The plants with the cream-colored markings on green leaves are called Ghost Trees, *Hedera canariensis argenteo variegata*. Behind them is an all-green type. The Japanese Maple, *Acer palmatum*, an artistic tree with fine-cut foliage, is especially attractive when the leaves turn red and yellow in the fall.

Topping each corner of the Tree-Shrew Cage is a plant with a slender trunk and grassy top known as Lily or Cabbage Palm, *Cordyline australis*, native to New Zealand and the islands of the Pacific. It is one of the largest examples of the Lily family. The shrub with shining deep green leaves and orange-scarlet flowers sprawling around the cage is *Tecomaria capensis*, a honeysuckle from South Africa. The vine over the house of the Kiwi Bird is *Tetrastigma serrelatum*, often called *Vitis* or *Cissus vomerensis*, a strong tendrill climber from West China and the Himalayas. Its enormous five-parted leaves are ovate and toothed on strong fuzzy petioles. The stems and young leaves of this rare vine are covered with silky light brown tomentum. Just beyond the cage there is a very young Pinnate Palm, *Rhopalostylis sapida*, from New Zealand, home of the Kiwi.

On the fence at the end of the path is a Giant Burmese Honeysuckle, *Lonicera hildebrandiana*, with glistening green leaves and a profusion of fragrant yellow flowers that turn orange-red before falling.

On the right side of the path, the first plant in the lawn is a Curly Palm, *Howea belmoreana*, from Lord Howe Islands. The next one and two others further on in this area, are Thatch Palms, *Howea fosteriana*. Both of these species have slender trunks ringed by old leaf scars but the leaves of the Curly Palm turn up, while those of the Thatch Palm droop down. At the back of the lawn is a high hedge of *Pittisporum undulatum*, Victorian Box or Australian Laurel. Two very tall Sugar Gums top them all.



In the center of the lawn is an upright plant with graceful recurved gray-green leaves. This is *Butia capitata*, called Pindo, Yatay or Jelly Palm. Its fruit clusters sometimes weigh up to 75 pounds. The fruit has a pleasant pineapple flavor and also makes good jelly. In the planting around the Japanese Stone Lantern is a Japanese Black Pine, *Pinus thunbergi* with characteristic stiff dark green needles. It is often used in Bonsai work because of its slow growth. In front is a Fernleaf Bamboo, *Bambusa multiplex*, a dwarf variety of Alphonse Karr, with a pinkish or yellow green-striped stem. Two ground covers are a low-growing dark green *Juniper chinensis pfitzeriana* and a very prostrate Shore Juniper, *J. chinensis* var. *conferta*, with light green foliage. As a background for this oriental landscape is a Trident Maple, *Acer buergerianum*, from Japan and China.

Near the road are two Coast Redwood, *Sequoia sempervirens*, upright trees with reddish-brown bark, spreading or drooping branches and curiously flattened jointed leaves. Small red-

dish flowers are followed by small ovoid cones. The slender coniferous tree just around the corner is a Dawn Redwood, *Metasequoia glyptostroboides* whose fern-like foliage turns a reddish-yellow before dropping off in cold weather. Paleobotanists consider this to be the rarest plant specimen growing in America today. It became extinct about twenty million years ago in North America. The only place it is known to exist is in Central China. A 12-year-old specimen in the Marine Base here is forty feet high.

Back on the roadway, turn right to a row of Heavenly Bamboo, *Nandina domestica*. The people of its native North China call it "Tein-chock" Sacred Bamboo. The lacy cut foliage on upright stems ranges in color from pale green to brilliant red. Small white flowers on large panicles turn to red berries — always a handsome plant. Behind the fourth *Nandina* are two prickly shrubs called *Hakea suaveolens*, or Needle Bush for the sharp leaves. Small sprays of white flowers towards the ends of the branches are followed by two winged seeds in woody capsules. Weeping Bottlebrush make a



background here. The slender drooping branches of this *Callistemon viminalis*, from Australia and Tasmania, bear flowers of red stamens around a corky seed cylinder. The seeds are minute. Near the steps is a clump of *Jasminum mesnyi*, Primrose Jasmine, an evergreen shrub from China. It grows in fountain form with many flexible green branches from the base—lovely in spring when covered with lemon-yellow flowers.

Beyond the next steps the ground cover is Bigleaf Periwinkle. *Vinca major* from Europe. Purple flowers in the spring are set off by bright green foliage. There is another Hair Palm in this planting. Near the next steps are two Incense Cedars, *Libocedrus decurrens*, native from Oregon to Lower California. This columnar tree, with short stiff branches and dark red bark, was discovered by Fremont on the South Fork of the American River in 1844. The fragrant dark green foliage is like Arborvite.

Skipping the next plants, note the intricate pattern of the bark of the Tristania Tree as you turn to the Pen-

guin enclosure. The shrubby plant behind it, with glossy leaves and small waxy white flowers, is *Escallonia pulverulenta* var. *glabra*. On the right of the walk are four spreading shrubs with quilted ovoid leaves, small white flowers and red berries in the fall. They are *Cotoneaster parneyi* which grow quite large.

At the turn of the path the tree-like shrub with many trunks and large deep-green heart-shape leaves is Pink Ball or Hydrangea Tree, *Dombeya wallichii*, from East Africa and Madagascar. This tree which belongs to the Chocolate Family is a beautiful sight when covered with its round pink flower clusters. All through this area are plantings of *Lantana camara*, in several colors. It has inch-wide heads of verbena-like flowers. The round shining black seeds that follow are relished by the birds. On the right of the path are three trees of the common Olive, *Olea europaea*, from the Mediterranean region.

In the raised planter between the olive trees and the Penguin Enclosure are two Fan Palms. The Guadalupe

Palm, *Erythea edulis*, has light-green leaves on long stalks. It has a beautiful inflorescence followed by a prominent fruit cluster. It comes from the Guadalupe Islands off the coast of Baja California. The more upright palm, *Washingtonia robusta*, comes from the same region. We shall see taller ones later.

Over on the right again, the roundish glossy-leaf shrub is the Looking Glass Plant, *Coprosma repens*, from New Zealand where the native Maoris call it Taupata. Tiny flowers on female plants are followed by orange-yellow berries. The Windmill Palm of China, *Trachycarpus fortunei*, is the one with the hairy trunk. Next is the Bunyabunya Pine, *Araucaria bidwillii*, of Queensland. There are a number of these thorny trees in our city, some one to two feet in diameter and over a hundred feet tall. The foot-long cones weigh up to 10 pounds. One of these pineapple-shape cones will yield 80, or more, two-inch seeds. When boiled, salted and roasted, the flavor is halfway between almonds and chestnuts, and they are highly nutritious. The aborigines used them for food, often traveling a hundred miles to areas where they were plentiful.

The next very striking tree, *Caesalpinia echinata*, Prickly Brazilwood, also has spiny stems and armed pinnate leaves that are a dark and glossy green. Small yellow flowers are followed in late summer by attractive leathery red and yellow seedpods. Beyond the Penguins there is another Guadalupe Palm. The watermelon-pink Hibiscus on the right is *H. rosasinensis*, var. Kona. Beyond it is Hibiscus San Diego Red or Brillante. They are from Asia, but widely grown in warm areas. In Hawaii, the red petals are considered good for diges-



The Sago Palm, *Cycas revoluta*, is crowned with stiff pinnate leaves that nestle a tomentose mass of chamois bracts with unusual red fruits in season. This spectacular tree is near the Zoo entrance. On the opposite page is the Abyssinian native, *Musa ensete*, the Ethiopian Banana, hiding among the trunks of three Queen Palms near the restaurant.







tion. In China they are sometimes pickled and eaten as a relish. The flowers of this variety yield a purple dye, used to color hair and eyebrows, or candied fruits and other foods.

Stay on the upper path where you will note a spreading shrub from Trinidad, with willow-like branches and pinnate leaves studded with short-stemmed globose heads of fluffy pinkish-red stamens, from October to March. The Greek name, *Calliandra*, means "beautiful stamen," a good description of *C. inequalatera*. When the Hawaiians string the blossoms into leis they look like a rope of feathers. This plant makes an excellent espalier.

On the left, the shrub with the pinkish-white flowers is *Abelia grandiflora* from Mexico. The small leaves on arching stems turn copper color in cold weather. Beyond, on the edge of the walkway, is a large *Eucalyptus*

*melliodora*, Yellow or Honey Box. It has two trunks and a huge scar where it probably lost another limb. It has persistent bark, myriads of small flowers and tiny seed capsules. Considered the best honey-producing tree among the eucalypti.

About 10 feet to the west is *Eucalyptus macarthuria*, from New South Wales. It has sub-fibrous bark, very narrow leaves and delicately formed flowers and seed capsules. Beside it is an Exile Tree or Yellow Oleander, *Thevetia nereifolia*, from Tropical America. It has light green leaves, yellow trumpet flowers and a smooth nut-like seed often carried as a lucky piece. The Mountain White Gum, further along, is noted for the way the dead bark falls from the branches and most of the trunk, leaving dull whitish surfaces. It is *Eucalyptus saligna* var. *pallidivaluis*.

Close to the path on the right is the Carob Tree, or St. John's Bread, *Ceratonia siliqua*, from Southern Europe. Inconspicuous brownish-red flowers among the dark leathery leaves give place to large flattened seedpods with a sweetish nutritious pulp. The Bible says that this was the food of the Prodigal Son and John the Baptist. On both sides of the end of the path is a Blue Gum, *Eucalyptus globulus*, from Tasmania. This strong grower, with blue-green foliage, has flower buds with warty protuberances. The bark on large trees is constantly flaking off in long strips.

Just as you join the main road there are two bushy succulents, *Aloe arborescens*, from South Africa. The fleshy notched leaves vary in width and length and pile up high in pointed rosettes. Around the winter holidays it has red torch-shaped flowers. Beyond some stepping stones are two Island Bottlebrush, *Melaleuca nesophila*, from Australia. They have small gray-green leaves, mauve staminate flowers and lumpy seed forms. Nearby are two Italian Cypress, *Cupressus sempervirens* var. *indica*, from Southern Europe and Western Asia. This pyramidal conifer has dark green foliage and one-inch cones. It was used as an ornamental tree in Roman villas. Doors made of this wood have lasted over a thousand years. Ancient Greeks carved statues of their gods from this wood and engraved their laws upon tablets of cypress. One of these trees, 121 feet high and 23 feet around, was found in the Alps.

Hanging over the wall on the north end of the Spectacled Bear Grotto is a California Pepper Tree, *Schinus molle*, from South America. It has airy foliage, inconspicuous flowers in terminal panicles followed by coral-pink berries on female trees. It was a great tree to survive drought in early days before irrigation. After two more Island Bottlebrush there are three small native Hollyleaf Cherries, *Prunus ilicifolia*, with small round fruits and thin coverings of edible pulp. The



Surrounding the Prairie Dog Mound are wide variety of palm trees from the Pindo Palm, to the rare Phoenix paludosa, the Malayan Date, and *Phoenix canariensis*, the Canary Island Date.

dark green spiny-toothed leaves were often used for Christmas wreaths before our native shrubs were protected. The hedge to the right is Glossy Privet, *Ligustrum lucidum*, which has longer pointed leaves and is taller than the Japanese Privet, with which it is often confused. The waxy-white flower clusters are also larger and they bloom in spring instead of fall. The ground cover with large heart-shaped leaves of shining green is Algerian Ivy, *Hedera canariensis*.

The next compound is the home of the famous Koalas of Australia. Seven Bushy Yate or Fingerstall Gum, *Eucalyptus lehmanni*, make a low spreading shelter where these prize animals may hug the branches and munch on the spicy leaves. The dark foliage is somewhat reddish, the buds are in dense clusters on a flattened stalk. When the finger-like caps fall off they expose large fluffs of silky greenish-yellow bloom. The pointed seedpods are fused into an inseparable mass. The leaves of this and a few other eucalyptus are the main reason this rare animal thrives so well at the San Diego Zoo.

Cross the road diagonally to a group of colored chairs. The first palm with multiple trunks is *Phoenix reclinata*. Senegal Date Palm from South Africa. It has arching feathered leaves, small yellow flowers and date-like orange fruits which turn brown when fully ripe. The hard seed has a thin edible covering. Beyond the next two Pindo Palms is *Phoenix paludosa*, the rare Malayan Date. It is similar to the Senegal but its ten trunks are much heavier. At the Prairie Dog Mound the four thick-trunked palms are *Phoenix canariensis*. The pinnate leaves, up to fifteen feet long on this Canary Island Date, form a globular crown on its straight erect trunk. There are seven more Pindo Palms in this area.

Two plants with evergreen sword-like leaves alternate in the lagoon. The Wild Iris, *Moraea iridioides*, has leaves three feet high with white and light yellow flowers crested with pale blue on long wand stems. In summer it blooms every two weeks. The Blue Flax Lily, *Dianella ensifolia*, from Ceylon, Australia and Hawaii, is noted for its large panicles of tiny pale-blue flowers that give way to stunning bright blue bead-like berries in summer. The grassy white and green perennial with spikes of lilac flowers and black fruit is *Liriope muscari*, var. *variegata*, from the Orient. It is sometimes sold as Mondo or Lily Turf. You will notice that the formidable ground cover in front of the Elephant Com-

pound is *Ferocactus viridescens*, whose steel-like spines will penetrate the stoutest shoes.

Now cross the road to see another Bottlebrush, *Melaleuca genistifolia*. White Fleece Tree, in front of the Rest Rooms. It has tiny green leaves and showy white bottlebrush flowers. Just beyond are some lofty Washingtonia Palms, showing their brown petticoats. In front of the Hyrax Enclosure the medium-sized trees of drooping habit, with thin rounded gray-green leaves, are Flooded Gum, *Eucalyptus rudis*. Further along in the walkway and compounds are several *E. cornuta*, with dark sub-fibrous bark and masses of greenish-yellow flowers from buds with finger-like lids. The flowers and seed capsules are smaller and more separate than *E. lehmanni*.

Across the road, at the turn, is a medium-sized feather-leaved King Palm, *Archotophoenix cunninghamiana*, of Queensland. Locally it is incorrectly known as *Seafortbia elegans*. It is noted for its stately habit, pendulous amethyst flower clusters and showy red fruits. There are more Bird-of-Paradise in this planting surrounded by an attractive hedge of Dwarf Boxwood, *Buxus microphylla* var. *japonica*, with small dense shining green leaves.

Continue past the Camels and Llamas and turn sharp left at the intersection to see one of the largest plants in the Lily Family, *Yucca elephantipes*, or *gigantea*. On the steep bank are several of these bold stiff-leaved plants from Mexico and Guatemala. It bears white flowers in large dense panicles followed by clusters of date-like fruit. On the right are some Evergreen Chinese Elm, *Ulmus parvifloia semper-virens*, a graceful tree with feathery foliage and weeping habit.

As you go down this "G" Canyon there is a forest of eucalypti on your left. To the right, between the small animal cages, there is a truly colorful display of white and baby-blue Leadwort, *Plumbago capensis*. When you reach the bottom of this road cross diagonally and take the escalator to the summit. Turn right along the Large Bird Cages to the new Gorilla Apartments. The handsome clumps of Giant Bamboo, *Sinocalmus oldhami*, recently moved in, look as if they have always been there. From this section it is an easy walk to the top of "B" mesa, recently named Belle Benchley Plaza. At the Gift Shop near the exits, copies of the other three Zoo Plant Tours may be purchased. Enjoy all of them.



# A SHADE GARDEN TO REMEMBER

By Alice M. Clark

Photos by  
Vi Morgenroth

THESE words should have been written sooner because Ora left for her terrestrial garden in May. To teachers of twenty years ago, to avid antique collectors, to begonia and fern enthusiasts, "Ora" will always mean Ora Wilson. She and her



husband, Percy, lived in one of the early "Spanish Stucco" subdivisions in Kensington, close to Hoover High School where she taught mathematics for many years. A good wife to a good man, but without children of her own, Ora was a good teacher to a host of youngsters whose names are now well known in the community and some, like Arthur Linkletter and Ted Williams, who are national figures.

Mr. Wilson died in 1948. Ora, who was head of the Mathematics Department when she retired in 1950 after forty years of teaching, could have moved to a larger, finer house. But that would have meant more work, with less time for her beloved garden or the many sudden "treks" she liked

to take to look for more plant and antique treasures.

Moving would have disturbed many roots, not only plant roots but the friendship roots that go deep with near neighbors, like Fern Bassett and others. Indoors there were plenty of shelves for rare old china and glass and eighteen hundred toothpick holders, and there was a spare room for overnight guests. Outdoors, Ora had her garden. The little stone in the patio floor, with the date "1925," told when it was started. Year by year, her interest had intensified in the enclosed 35x38-foot area until it became a "plant heaven" that amazed horticultural experts and delighted her friends.

Ora gave herself to many worthwhile church, school and civic projects, as well as plants. When she helped the Goodwill Industries with their antiques, she taught herself the lore of button collecting. She spent long evenings sorting through thousands of buttons, brought home in heavy sacks, just to be sure no rare specimens escaped a good sale.

This same thoroughness and patience was evidenced in her shade garden. She treated it as an outdoor home. The hall was inside the entrance gate where you paused for greetings. Then your eyes were drawn to the decor of fern baskets whose fronds overflowed like festoons of green lace against the north wall of the garage that formed the left side of the enclosure. Like tapestry pillows on the ledge at the base were the rich greens of rex begonias, fretted with splashes of copper, silver, rose and cream.

As a fireplace claims attention in a living room, so a waterfall trickled over a large stone grotto at the end of a central area. It was tufted with rare plants and on the left side rested Ora's

one doesn't disturb the roots of fr

famous California maidenhair fern, more than five feet across. Overhead was a basket of *Polypodium subauriculatum*, also noted for its size. Extra shade was maintained over most of this room by the leafy limbs of a variegated ivy with a trunk so thick that it practically engulfed the redwood post that supported that side of the lath roof. On the other side, as a divider between the plant and "people" space of the room, was the familiar old-time glider swing, scene of so many lively discussions. These talks were always punctuated with refreshments the hostess seemed to produce with the ease of a magician. After large gatherings, when the guests were surfeited with good food and plant talk, in this "dining" section the table was cleared so that visiting friends and celebrities might autograph a tablecloth decorated with begonia paintings, made for her by Dorothy Behrends of Encinitas, author of "Begonias, Slanted Towards the Beginner."

Behind the grotto at the west end was a hall-like space that led, on the left, to a room in back of the garage where the mechanics of gardening were stored, the plant kitchen, so to speak. Ora's mind was very practical. What she learned, as she gardened, she wanted to share—to show others the why and how of it. She wrote and lectured but she preferred to answer questions in the garden where she could demonstrate her exact potting, feeding and spraying techniques and the thriving plants that resulted. There was another gate that opened on a sunny unroofed section where she collected succulents and other flowers her gardening instinct could not resist. The next door was to the nursery, a small business-like glasshouse.

Then began the built-up beds of brown sandstone that wound in and





## *ndship grown in such fallow soil*

out against the far corner and the other long side of the lathhouse. These contained floriferous displays of cane and hirsute begonias. Mounds of ferns and small-leaved begonias were tucked into pockets in the rocks. The result was an illusion of a long path in the woods.

In later years Ora opened up the far corner of her house with a glass wall and door that framed a view of the garden and gave direct access to a wooden terrace there. The twisted gray trunks of an avocado lifted leafy boughs aloft to shade the area and the many begonias, azaleas and ferns around it. Some fine specimens of staghorn ferns, hung from a trellis against the wall of her neighbor's house, completed the picture in this corner of the garden.

Ora's fingers were emerald green and her mind was as brilliant. Plant names rolled off her tongue like music, not jawbreakers. She read copiously to keep up with the latest information on her specialties. In later years, after an outstanding success with begonias, ferns became Ora's real love. She searched for them in nurseries all over the state and in homes of hybridists who often returned as her guests. One of her happiest and most fruitful trips was the Stanford Fern Foray into Northern California. It was then she met national fern authorities. She was specially taken by Barbara Joe Hoshizaki, whose splendid work on ferns has been published by "Lasca Leaves." Ora was so discerning and discriminating on her fern hunts that eventually her garden contained one of the finest fern collections in Southern California.

There were few worthwhile gardeners who did not find their way to Ora's haven, there to delight in the funny stories she told so well and to

leave with fresh ideas to improve their own gardens. Ed Moore, who has such a lush tropical garden in Pacific Beach, was a friend who visited her often, as did George Evans who wins so many prizes for his artistic fern dells at the Del Mar Fair. Ora was an inspiration to many members of local garden clubs. It was at a lecture she gave to the Floral Association that Ora met Mary Zemcik who later went with her on many collecting trips and to whom she left her choice ferns.

Mr. Zemcik recalls that when his wife and Ora visited a nursery he would stand in the back to watch the fun. First the salesman would produce several ferns that rated little more than a sniff from the ladies. Then the dealer would figure to put these know-it-alls in their place by bringing out his rarest plant with a high-sounding name. With one withering glance Ora would inform him in 14-carat fern language, that the name was incorrect, that it was rightly called thus and so, a hybrid of this and that, made in such and such a year by Mr. Whosit. About then the nurseryman would have urgent business with a customer in another part of the lathhouse.

Ora's "adopted family," the MacLaggans of Point Loma, has carried out her wishes that as many of her possessions as possible would be returned to their original donors. Some of the large hardy ferns went to the Balboa Park Lathhouse, and others to special collectors. The Wilson home has been purchased by Mrs. Harry Brunner, the daughter of one of Ora's best friends. She hopes to keep up the lathhouse, and would welcome visitors.

Ora Wilson lived a very trowel-full life and left the imprint of her garden's beauty on our minds and hearts. This is our tribute to a gardener's gardener and a true friend.



# WHEN IS A NOTHOPANAX A GINWOOD TREE?

*California Garden's etymological expert tilts with the botanists who change the names of plants so often that we mere gardeners often never catch up. The merry mixup of names is so bad, the eye-catching beauty shown below came to him without a*

LANDSCAPE architects, horticulturists, gardeners, all who work with plants have their low hours with the botanists. When a lifetime is scarcely sufficient to acquaint one's self with plants that seem desirable to accumulate, the changing of an established name works a considerable hardship. The next logical

*name. Believed to be of the panax series, Hoyt received it unnamed as a seedling. Now it has grown to a spectacular plant. In this article, he explores the botanists' problems, but concludes some attempt should be made to ease our weary minds.*

Photo by Eugene Cooper





thought is why this must be. A short outline and appraisal of the subject may possibly afford an answer. At least it should be an interesting story.

Botany is a living science, ever-changing in most aspects, certainly in nomenclature. Accepted rules call for the original naming of a plant to stand . . . the name applied by the discoverer and described by him. It can be ungrammatical and illogical, but must be used as such forevermore . . . unless. As history is made and the generations look back, a species may be found named earlier than the existing designation, so the we must go back to the original in every detail.

This rule grew into being and finally in 1905 became a part of what is known as the Vienna Code. This is recognized by nearly all botanists over the world. But that is not as simple as it sounds. Further study of plant groupings with growing knowledge has in the past suggested and still advocates change, that is, deletion of a species from a genus or reverse action. Here is where they go "slap-happy."

So it is, that we, as gardeners in Southern California, to use a badly butchered and well-known genus to illustrate, have had to accept *Pyrostegia* for *Bignonia venusta* and *Phaedoranthus* for *Bignonia cherere*, to mention only two in a list of some twenty-five deletions from *Bignonia* in Hortus II. One doesn't object too strenuously until some eager beaver botanist changes *Heteromeles arbutifolia* to *Photinia*, and back again to *Heteromeles*, all within the living memory of one generation.

#### NINE LEFT

Of 254 species of Ice-plants (*Mesembryanthemum*) listed in Hortus II, only nine are left. But this is understandable. The subject material precludes herbarium specimens, so that the genus never had been studied thoroughly until it could be done on the field. One wonders what Hortus III will bring up.

*Aralia*, another genus we know principally here by its segregates, samples the case in point for the botanical worker. Here a more or less frequent phenomenon, the variable juvenile foliage, is compounded over the years, the leaves going through two or three or more distinct changes in form, venation or arrangement. We all have seen this. If one goes back far enough, the following genera have been included in *Aralia* or so closely associated within the family that no one knows with any assurance where they

## ROLAND HOYT Recommends Botanists Take Pity On The Poor Gardeners

belong. These are plants we mostly know or can find about us, if we look. This paper didn't start out to make a case for the botanist, but seems to be doing just that. We all will be better provided with this particular knowledge, if we understand the difficulties still inherent in the situation, this sorting out of material into some kind of order.

#### DEVIL'S WALKING STICK

Still left in *Aralia* notably, are the "Devils Walking-stick" (*A. spinosa*). I don't know of this in Southern California. It is hardy from New York state south and as a boy in Iowa, I watched the slender, cruelly spined canes rise from the crown each spring. The Japanese *Angelica* (*A. elata*) is a little harder in frost and rather well known, but not here. The common *Fatsia*, ubiquitous, large-leaved and bold, fat burger of our planters (*Fatsia japonica* — now *F. sieboldii*) at one time included the Ricepaper Plant, that great soft-leaved and suckering, wandery-wooded thing (now *Tetrapanax papyrifera*) that the uninitiated still uses.

Closely related was *Fatsia horrida*, now *Opopanax horridum*, the "Devil's Club" and truly a very devil, horribly spined and with such handsome, great leaves one wonders how long it will be until some simple soul brings it down from the Pacific North into Southern California . . . run then, but not into a suckering patch of this.

Next notable on the list is *Aralia chabrieri*. This will be remembered as the finely divided mass of foliage, the narrow leaves with a red mid-rib, so popular in the conservatory of recent decades. It grows up . . . and one finds it out of doors in mild climates

as a tree much on the order of an olive. Horace Clay and Mr. Hubbard describe this in TREES FOR HAWAIIAN GARDENS. It has been used as a street tree there and in Southern California. There seems to be some uncertainty developing here so that we may expect some alteration or other, mutation or break to disturb the composure of some future generation. Ah resignation!

#### WATCH SIDE DOOR

*Pseudopanax lessoni*, a tree-like shrub that is in the lists of today, available and invaluable for wind and salt, seaside, comes into this baccanalia through the side door, the old *Aralia crassifolia*. The leaves still are thick, variously divided and changing, scarcely two seedlings matching. Hugh Evans noted as many as six observable changes in one plant, presumably of this species. Here is a handsome, upstanding, practical plant that should find greater use in these regions. *Nothopanax* qualifies for inclusion here by reason of another botheration that leads into more bewilderment.

At least six of these segregates refer to *Polyscias* which in turn is preferred by some botanists as *Nothopanax*. Probably the best known and the better of these is *Nothopanax arboreum*, a twenty-five foot tree of some quality. A specimen of this stood in the writer's back garden, sleek, dark-glistening, with foliage covering off low . . . there until moved out to some one, making space for a newer test. This tree is also known as "Ginwood" which seems appropriate and which may have some bearing on this further confusion and derangement.

The plant in the picture opposite probably qualifies through the panax series. No name is available. It came to the writer as a seedling in a gallon can from the Washington Street Nursery. If one looks closely, a change in the leaf is already indicated.

And now, to crown the whole lot and allow this teller of tales to tip-toe dizzily out of sight before questions, comes *Aralia elegantissima*, that well-known brown-green little shrub of shady corners and the plant house, the leaves shallow-round-toothed, narrow digitate or finger-like. This is now *Dizygotea elegantissima*. It is thought by some that this remains permanently in the juvenile stage and that looks reasonable but I find a personal note in my Hortus indicating a larger, bolder leaf form in maturity. And "though this be madness, yet there is method in't"

# *Phals are lots of fun for beginners or experts*

By Mrs. James C. Laughter



Though my husband and I have been growing orchids for some four-and-a-half years, I find myself somewhat reluctant to write advice about the *Phalaenopsis*, the lovely Moth Orchid commonly called Phals. I am certainly no expert on this type of orchid since we have been growing them only about a year.

I have been fortunate enough to have success with them. Perhaps some of my love comes through, for I find them more rewarding than some of the other types of orchids we have like the *Cymbidiums*, *Cattleyas*, *Vandas*, *Dendrobiums* and others.

At present we have 68 plants in bloom, with quite a few seedlings coming along. In fact, we have 144 plants altogether. We hope to increase this amount shortly, to keep abreast of the newer crosses.

Some of the seedlings have bloomed when just about four inches across the whole plant. They are much faster growing than *Cattleyas*, about three years from flask to blooming size. Of course some plants take longer, but these produce heavier and larger spikes. Do not judge their first blooms too harshly, for they may improve on their second blooming.

We have a 14 foot x 24 foot greenhouse, with a heater set at about 60 degrees lowest temperature. This heater is turned off completely as the weather warms and night temperatures go no lower than 60. In hot weather I try to keep the temperature down to 86 degrees, by turning on two foggers we have under the two side benches, also by wetting down the bark floor. This also helps the humidity. Our heater has a fan which we can turn on manually in the daytime, both summer and winter. This keeps the air stirring, so that it does not become stagnant. This fan is up in the rafters, so to speak. We also have a fan under the bench blowing toward the fogger, and another on the other side of the house, blowing toward the fogger. In the opposite direction from the first.

## DON'T SUNBURN

We grow the Phals along with

*Mrs. Laughter's Phals have won ribbons and trophies, garnering "Best Phalaenopsis of the Show" in Monterey in March and winning seven ribbons, two medals and the Winslip Trophy in display with Ernest Angus at the recent San Diego Orchid Show.*



the Cattleyas and species, giving them the same degree of light. Others claim they should be grown darker, but I feel the plants will let you know what they like, ours seem to respond by giving us a great many flowers. Care should be taken that the leaves do not sunburn with too much light. We spray-paint the greenhouse in the Spring each year with a mixture of white lead and gasoline.

The humidity in our greenhouse varies between 50 degrees some days to 80 degrees at night. I am giving the lowest and highest degrees here. This does vary.

#### FERTILIZE WEEKLY

I try to fertilize once a week with 3-1-2 fertilizer, weak strength. About 6 teaspoons to 8 gallons of water. Sometimes in cloudy weather this is delayed, for orchids do not absorb fertilizer unless the sun is out nice and bright, also they stay too wet. Once a month flush the bark well. This removes some of the salts that accumulate.

I water the plants approximately twice a week, once with the fertilizer. Phals have no pseudo bulbs and cannot store up food and water. They must never go completely dry, they should be kept damp, not soaking wet. In summer during hot weather, it may be necessary to water more often. I put plastic tags in the pots close to the edge, these can be pulled out and felt, if wet then I do not water. I find this a good way to check, to be sure they are not completely dry too. Or you can fill a pot the same size with bark, water, then turn it out when you think it is time to water again, if wet, do not water. After a few times you will eventually know just how long to wait between waterings.

#### FIR BARK

We grow the Phals in fir bark. Medium size for the smaller plants, and the large chunk for the larger plants. This gives them good drainage and the air around the roots they like. The fir bark I like to change about every six months, or as soon as they are through blooming. Otherwise the nitrogen salts build up too much in the bark.

It is difficult at times to follow through on this for the plants go on blooming and sending up new spikes for such a long period of time, or the old spike will send out side branches. They bloom twice a year, in the Spring and again in the

Fall. If a spike gets damaged by a slug or broken off, they promptly send out side shoots, if the spike is long enough to have nodes. Otherwise they will send out a new spike.

We have the large white, white with red lip, white with dark lavender lip, pink with slightly darker lip, pink with white lip, pink with maroon lip. Pinks come in various shades, some light in color, others a deep dark shade, many between the two. Also some have small flowers, others have flowers four and one-half to five inches across. We also have a few yellows with a dark orange lip. There are many more different shades that I hope to acquire in the future.

These plants have from a few flowers to a great many on long spikes, depending on the variety,

and of course the size of the plant.

#### HARD LEAVES

The leaves should have a hardness to them, not be limp. This is one way to tell if they are getting enough humidity.

I have been told mealybugs are a pest to be found on Phals, so far, I have never found them on any of our plants. Be sure to examine any new plants for such before putting them among your other plants. Slugs and snails can be taken care of with Cooke's slug and snail bait. It is heartbreaking to find a slug or snail has eaten a prize flower, or ruined a nice new, long awaited, spike. Though the plant will respond as I mentioned earlier.

As I have stated before I am no authority, but this is my way of growing them. I feel rewarded indeed.





IN 1925 Kate O. Sessions gave 55 bound volumes of *The Garden*, an English weekly garden magazine, to the San Diego Floral Association. In their musty old tomes such a wealth of information, history, and literature abounds that thousands of hours of pleasure await anyone with time to browse or research through them at the association library in Balboa Park.

The period is from 1871 to the end of the 19th century when William Robinson was the editor. Like many Englishmen, his approach to gardening is a combination of scientific experiment and observation and the poetic appreciation of the joyous adventure in growing and creating new plants.

Each volume is dedicated to some distinguished contributor to the advance in horticulture. A fascinating portrait gallery of these personalities accumulates and unfolds as a kind of epic in the struggles and creations that are the foundation of modern gardening.

The color plates of flowers, trees and fruits, still brilliant and clear, collected from all parts of the world, are as limpidly beautiful as choice paintings. Flowers, long lost and forgotten, glow in life-like images. Many you have never seen are there, with a botanical description of its origin and culture, and often how it has adapted to the gardens of England.

This is the period when the British Empire was ascending to its peak of power and prestige, and when Englishmen fanned out over it, and the rest of the world, eager to bring back the exotics, and adapt them to the English garden. Mr. Robinson welcomed news of the unique, along with contributions from travelers with horticultural know-how and discrimination.

The chilly English climate was a challenge when it came to adapting many of the exotics, and it is amazing how many they made grow. It took greenhouses, cold frames, pits, walls and much experimentation in methods of heating. The commercial nurseriesmen vied with each other in advertising what they had collected and invented: coal stoves, paraffin lamps, water pipes, and electric lights.

New tools, mostly mowers and harrows (this was the day before the gas or electric engine) were offered along with fancy spades and forks, for elbow-grease and deep digging by hand really did the work, as it still does.

# EX- PLOR -ING AN EXCIT -ING WORLD OF KNOW- LEDGE

By Rosalie F. Garcia

A new wheelbarrow, hailed as the first improvement since it was invented by Leonardo da Vinci got a big reception. It was invented by a Mr. Harris in Hartford, Connecticut. In 1880 it had rubber tires, drawers for seeds, hooks for buckets, and a socket for an umbrella! Lead us to one!

Organic gardeners will note with interest that all gardening in that period was organic. Soil rejuvenation consisted of the use of ashes, burnt earth, sand or grit, peat, leaf-mold, stable manure, and salt, a pound to 100 square feet. All vegetable refuse went into compost, and all of this was turned from the "bottom spit" to the top—by hand with a spade or fork. Manure water and rain water were recommended for orchids and pot plants.

An article on the merits of a dry-earth sewage system, and how to divert it to fertilizing an orchard is adaptable by a country gardener today.

Insects did not cause as much trouble then as now, and maybe their method of controlling them should be looked into. They had plenty of soot and doused plants with it, and that was it. Killing the peach borer was simple and direct: run a wire into the hole and twist it.

Although Mr. Robinson made it clear in an early issue that he would have none of this distinction between floriculture and horticulture, for they were the same to him, he did have a separate department on Kitchen Gardens and urged planting more of them. He encouraged trying out new vegetables, and prodded the English to eat more salads, which they seemed to be stubborn about. He chided them about turning up their noses at dandelions for salads and greens, and reminded them that the French and Germans did not consider them "weeds."

## VEGETABLES

Most new vegetables came from America, as well as new varieties of the old staples, especially potatoes. The English worked on improving the peas. He hailed the tomato as an ornamental love apple, as the conquest of the century. The English did not take to it quickly and he had many articles praising its flavor, recipes for cooking, drying, preserving, and plain urging them to eat it raw, just like fruit.

Strawberries were something else. Everybody loved them, and they were poetically described as "excitable plants." Anyone who had a different idea on how to grow them, or had propagated a different variety was given a chance to tell about it. Letters on the strawberry are often lyric in their descriptions.

Covent Garden advertisements of the market offerings in the big central market listed the common vegetables,

known today, also a few such as a kind of turnip, called rampion; a soft-headed cabbage, colewort; a carrot with aromatic seeds, fennel; and cobs, which seemed to be corn on the cob.

Prices were high, so it is no wonder that the urban English did not take to a variety of new vegetables. Fruits were limited and even higher. You really had to be pretty well-off to afford fruit, at a shilling apiece. Apples, peaches and plums were mostly imported from America.

#### GRANDFATHER'S CIDER

Although *The Garden* was a magazine primarily for the "pleasure" gardener, it often ran articles on commercial food crops. It urged local planting of more orchards, and told a cute little story to emphasize its point: A young farmer was advised to plant an orchard, but could see no value in it, for it would take too long to bear. The father also refused to plant for the same reason. But the old grandfather had nothing better to do, so he set out some apple trees and lived to enjoy barrels of apple cider.

The English love of jam, mostly imported, was used to inspire a campaign for growing more fruit, and much advice on what to plant and how to care for the orchards was available.

This was the period when the Americans took a great leap forward in fruit growing. It tripled in the 1870s and '80s, and England was its best market. In 1877 eight million bushels of fresh peaches were produced, besides those canned, dried and made into brandy (five bushels of peaches make one gallon of brandy, in case you want to know). In 1884 the American peach crop amounted to \$50,000,000.00, mostly from the states of Delaware and Maryland, where French varieties had been adapted.

#### CASHEWS FROM INDIA

The cashew nut, imported from India and the West Indies, hit the London markets in the 1870s. It was given a fanfare introduction with color plates and a description of how the nut is an outside appendage of the pear-shaped fleshy receptacle, and is no good unless roasted.

Saffron culture on the stony hillsides of Italy where the bulbs are planted; the petals and pistils are harvested, dried and powdered at a good profit is all so carefully researched that one could use the article for a guide in 1963.

The *Garden* published a calendar of meetings of the garden clubs, mostly chapters of the Royal Society, and reports on flower shows. They sound familiar. Judges were often accused of not being qualified, or of doing a sloppy job, the flowers wilted, not enough people showed up to work, arrangement and display were poor, and often the weather had been so chilly there were few flowers, and one rose show was practically nothing.

The Flower Arrangers Guild would love and recognize the arguments and controversies on arrangements. Table arrangements excited more heated arguments than the shows. One good soul was livid over the style of laying flowers and greenery on the table cloth. It was a desecration of both the flowers and the linen! Water bouquets were just being discovered, and there were many opinions on what one could do with them. The Japanese influence had barely made its impression, but some of the critics had already got the message, and were talking learnedly about line and design, and using fewer flowers.

#### GARDEN PARTIES

Garden parties, not so much as social events, which they were, were reported as horticultural events, and we get wonderful glimpses of the fine estate gardens, and what grew in them.

Orchid growing was old stuff in the great greenhouses, and was a kind of staple. The modern orchid grower can find much, both historically and horticulturally in these old volumes. There are many beautiful color plates of rare orchids, which are still rare.

Azaleas were common, and grew outside in sheltered places. There is a warning that honey from azalea flowers is poison unless cooked. When used in candy and mixed drinks, it gives an exotic flavor. The old speculation that it was the mad honey from azaleas that killed Xenophon's soldiers so long ago is revived by a traveler who had just returned from the mountains where the soldiers died.

#### THE UNCOMMON CAMELLIA

Camellias were not so common in the 1870's, but were being introduced into the greenhouses, and intensive experimentation and propagation were going on.

A wonderful tour of the great gardens of the world in that period is at your service for the hunting. In England there are great and small ones. Hampton Court, the palace built by

Cardinal Woolsey in the 16th century is cited as an example of the extremes, in the grand manner, in landscape architecture. One part is laid out in the formal, geometric and artificial pattern, the other in the romantic to assume a state of nature.

The natural gardens around Niagara Falls in the 70's, fringed with gentians greenery and flowering vines, but "above all the majesty and power of the river and falls" so different from the placid English rivers impressed an English tourist.

A most scholarly summary of quotations from Shakespeare's plays in which gardens and flowers are woven into great poetry is an excellent source for our OLD GLOBE THEATRE should it decide to plant a Shakespeare garden to enhance the atmosphere of its theatre.

But the most frustrating garden any Englishman ever saw was the Pallancini Gardens on a bluff overlooking the sea above Genoa, Italy. The serious and learned horticulturist who reported to *The Garden* was entranced with the treasures in shrubs, trees and flowers, rare and exotic. He marvelled at the expense and the care, but what he called "puerilities" nearly ran him crazy. Just as he would become concentrated in rapture at some rare plant, a slight motion would set off something that would squirt water on him. About the time he would recover from that and enter some bower, a shower would douse him. Even in a boat which took him through underground caverns and grottoes, he was not safe. More squirts of water awaited him on curves and turns.

#### ARTIFICIAL SARCOPHAGI

He was revolted when he learned that the handsome sarcophagi, a tomb and an ancient cemetery were all artificial. No one was buried there, or ever would be.

What he called "tortuosities" of various kinds maddened him: Shrubs and trees trimmed into grotesque temples, animals and objects.

He left Pallancini Gardens quivering with rage that so noble a location and collection of rare and beautiful plants were so displayed and desecrated.

One could go on indefinitely, but these tid-bits should be enough to whet your appetite. Call the Librarian for an appointment, and dig for this hidden treasure which we are so blessed in having in the library of the San Diego Floral Association.

RFG



# A Calendar of

## Care

### ● FUCHSIAS

- \*Blooming season ends
- \*Watch for Santanas
- \*Protect the below-par
- \*Autumn pruning tips

AS THE blooming season draws to a close, there are a few things important to observe in the care of Fuchsias.

The feeding with organic fertilizer—which has been regular and frequent to now—should be reduced gradually along with watering to allow the plant to go into the needed dormant or rest period.

In watering, however, we should see that they have enough moisture at all times to keep them healthy and vigorous, because October and November sometimes bring the worst heat of the season to Southern California with the occasional Santana winds. Basket or container plants may be damaged or even killed by dryness during such periods before one notices, especially if the nights are cool and the humidity is low. So check for moisture often.

Garden pests are sometimes worse at this time of year on tired, below-par plants. Especially sharp water spraying (both on upper and lower sides of leaves) will dislodge some insects. And for mites, red spider,

aphis and white fly, sprays are most effective.

It is very important to provide the kind of care up to this time also for those who want fine, healthy and vigorous cuttings from autumn pruning. More and more growers seem to prefer much of their pruning in the fall in this area, claiming less chance of die-back, frost damage and other potential hazards existing in Spring when the sap is going up. Basket and container plants are especially adapted to autumn pruning and should be cut back closely at least to within two or three inches of basket edge. Other types should be pruned back to the basic shape of their particular type and place or purpose in the garden, so that whether it is bush, background, border, tree or espalier, when the new growth starts perhaps next Spring, pinching and shaping may then continue to perfect the picture.

Our beautifully balanced San Diego climate may allow the luxury of some lovely Fuchsia blooms even all winter, provided they have regular and proper water, food and care. But at our house in the redwoods by the Golden Gate our old Fuchsia plants—not fed or

watered in 15 years—are still blooming. Such is their amazing adaptability and fascination.

In a recent trip across this continent visiting among growers and hybridizers, the increased interest and popularity of our shy little rain-forest flower is surprising indeed. Perhaps it is time already for its sunny warm beauty, its infinite variety of color combination and character, its indefinable natural charm and definite distinctiveness to symbolize such a city as San Diego—as other flowers have been chosen in other places. Who knows?

Morrison W. Doty  
*S. D. Fuchsia Society*

### ● BEGONIAS

- \*It's do-little time
- \*Pile the mulch high
- \*Stalks drop naturally
- \*Include instructions

We are nearing the "do little" time of begonia culture. If we will do little to encourage new growth, we will help to "harden off" our begonias, preparatory to a cold spell.

Frosts have been known to strike in October in the San Diego area. New or tender growth is the first to show effects, sometimes resulting as a forerunner to the begonia's demise.

To help keep the fibrous roots on a begonia protected from a severe cold spell, it is wise to pile a mulch around the roots, to approximately two inches in depth. If the begonia is growing in a container, it is quite probable that there will not be room for this depth. By sinking the containers into the soil to the rim, a mulch can then be spread well around the root area and a little beyond.

Most of the container grown begonias, hit or damaged by severe cold spells, were unprotected around the root zone. If the roots are protected, they usually send up new growth, even when the top growth is severely damaged.

In the case of rhizomatous (creep-

ing root-stalk) begonias, a mulch should be placed over the rhizomes, but the mulch should not be kept moist, or decay is encouraged.

Tuberous begonias are now declining, going into their regular dormant period. The stalks should be allowed to yellow and age, thereby dropping off naturally. This can be done by withholding water from the plants. Container-grown tuberous begonias may be turned on their sides, to encourage this rest period, rather than prolonging straggly growth.

The tubers should be cleaned of soil about a month after the tops have fallen, then the tubers should be placed in a cool, dry location—preferably in peat moss for the winter rest.

Allow old growth to remain on the fibrous rooted begonias, as pruning encourages new growth.

Many of the bedding (also called Wax) begonias are colorful and showy at this time. Do not cut them back until late winter, when it is safe to encourage new growth.

If you have an artificially heated glasshouse, you will be able to raise good looking potted specimens for Christmas gifts. When giving plants to friends, remember to include *written instructions* to all but the experienced gardener, as it will prolong the life of your gift.

Dorothy S. Behrends  
E. K. Gray Begonia Club

## ● DAHLIAS

- \*Care continues buds
- \*Yank out the sick
- \*Cut the feeder roots
- \*Protect root moisture

IT'S about the end of the year for dahlias. But, if the plants have been well cared for during the summer and if the schedule of watering and spraying is continued, it is reasonable to expect buds to continue to open and blossom into early November.

Most dahlia blooms will be of in-

ferior quality after the first week of October. They will be smaller, and less substance in the petals and foliage will be noticed.

If the flowers do not blossom with open centers, most of them will show their centers almost immediately. Late fall is seed making time and nature hurries up the process of making the pollen easily available to the bees.

These conditions of decline are just that; it's that time of year, and the signs of decline do not mean sick plants or diseased roots.

Of course dahlias have their ailments, but sick plants don't live to a ripe old age. The bad ones die young, and good riddance. When it is evident that plants are sick—regardless of the time of year—they should be yanked out and destroyed without a trace.

The average gardener can expect to find mildew on his dahlias late in the season, but that isn't a sign of disease. Likewise for red spider. After either has gotten started it's probably too late to do anything about it; but the gardener can try. Spray with acti-dione or dust with sulphur for (or against) mildew. Spray with kelthane or a good miticide if there's a chance against the spidermites.

About those roots. Were the plants good, and the blossoms of good quality? Was there a feeling of pride every time a good flower was picked? If so, the average gardener will want to have the same for next year. But be sure the plants were worth it before fretting too much.

Healthy roots in a bed with good drainage should keep just like they are until spring. Then they can be dug and divided for replanting.

Should there be enough rain to keep the ground wet, and if there are doubts about the drainage, digging is advisable if one wants to keep the roots. But remember that standard dahlia varieties can be replaced from the nursery without any trouble and with little expense.

If the variety is scarce, if there is that element of pride and pleasure in a given plant, or if it was obtained with difficulty and an expensive outlay, dig.

Go all around the clump at a distance of 12 inches or more with a spade driven straight down. That cuts the feeder roots without damaging the tubers. If the ground is not wet, leave the clump to cure in the ground for a couple of days. Then lift carefully with spade or fork pushed deeply under the clump.

Some of the roots will have thin

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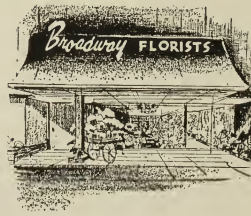
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necks, so try to keep as much soil around the clump as possible until the roots can be handled without breaking.

The gardener who never has dug dahlia roots will learn faster if he asks an experienced dahlia grower to help.

Once the clump is up there are several courses open to the gardener. Some hobbyists in this area have success in keeping the roots by merely lifting the clumps to a dry or well drained spot under a tree or on the dry side of the house, and covering them with a plastic sheet. Shade and ventilation without drying drafts are essential.

The other favored method is to store the clumps in cardboard boxes filled with vermiculite, peat moss, sand, or other material that will keep in the natural moisture of the roots and keep out the shriveling dry air of the winter months.

The experienced dahlia grower more than likely would divide the clumps after washing off the dirt. Or, he would turn over the clumps to let all the moisture drain out of the crown before storing it whole or in divisions. He also might separate the clump into individual roots, carefully trimming each and discarding the doubtful ones, and the ones without eyes.

The experienced grower also might store some of the roots in plastic bags packed with vermiculite, or in boxes of shredded paper, or containers of a variety of packing materials. He would be inclined to experiment from year to year to find the best method.

And he would profit by going to dahlia society meetings to listen to other growers talk about how they do it.

Larry Sisk

San Diego County Dahlia Society.

sist buying some new roses so you might as well decide now where you want them and how large a bed you will need. As you know, some roses grow larger than others, but as a general rule, plant each bush 30 to 36 inches from its nearest neighbor for hybrid teas and larger floribundas. Smaller floribundas can be planted 20 to 24 inches apart while climbers should have about six feet spacing. No more than two rows should be planted in one bed unless both sides are accessible in which case four rows still allow relatively easy access for care and feeding. The most successful rosarians limit beds to strips of two rows each.

Having decided where and how large, prepare the soil by digging two good spade layers deep to about 18 to 24 inches. The top layer is laid aside as you spade the bed and then the bottom layer is turned over and mixed with about one-third of its volume of peat moss or wood sawdust and a good cupful each of gypsum, soil sulfur, bone meal or superphosphate and Humisite to each square foot. When the bottom layer is thoroughly mixed, the topsoil can be thrown in, removing all roots and sod as you go along. Rotting organic material has no place in a rose bed unless you can allow it to remain fallow for six months or longer, so do not incorporate manure or turned under sod in the new bed.

If you are sure you know how to handle it and can tolerate an unplanted bed for a few months, the use of calcium cyanamide can be of advantage. This material, if used properly, will kill all vegetation and will itself decompose in a couple of months to a beneficial source of nitrogen. Be careful to use strictly according to directions and keep watered to assist decomposition. It will give your soil a fresh start free of Bermuda grass.

If you have the energy, respade this new bed every couple of weeks until time for planting. Successful gardening never comes easy and time spent in preparing the soil will give your new plants a good start. A green thumb gets most of its color from perspiration.

Much has been made of the desirability of good drainage. Preparation as just outlined will go a long way towards providing proper drainage. With the addition of peat moss or sawdust and spading, the new bed will be 3 or 4 inches above the surrounding level. Leave it this way and constrain with redwood edging strips

## ● ROSES

- \*Prepare for Spring
- \*Try calcium cyanimide
- \*Spade bed regularly
- \*Don't stop feeding

Now is the time of the year to prepare that new plot for Spring bare-root planting. You probably can't re-

or whatever you wish. In obstinate cases where a hole full of water does not drain away in one or two days, you might have to install concrete pipe drains down the center and lead the drain pipes to a deep sump or to lower ground if available. Drainage will slowly improve as gypsum and other acid materials percolate into the subsoil. It doesn't do any good to throw a layer of rocks or other debris into the bottom of the bed. The texture or tilth of the soil and a place for water to go are the important factors.

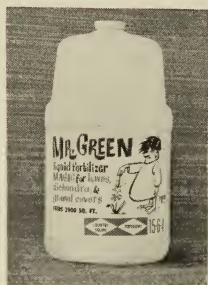
If your soil drains too fast, the addition of peat moss or sawdust will make it more retentive. Through time, it too will improve as humic acid leaches down from mulches subsequently applied.

Care of existing roses is not particularly exhausting from now until pruning time in late January. Keep up the spraying and feeding program as outlined in previous columns. There are several rose shows in the fall in this area, one being the Rose Hills Thanksgiving Show in Whittier. If you have been neglecting disbudding through the summer months, start again if you want good blooms for these shows.

Some authorities recommend withholding food and water during November so as to enforce an artificial sort of dormancy not normally experienced in Southern California. I don't believe this is either necessary or desirable. It is better to keep up the regular feeding and watering schedule right through the winter. A vigorous, growing bush will continue to throw out the new lower growth one often wants to retain at pruning time.

Although most bare-root planting is done in early spring in this part of the country, it is entirely feasible to plant during the late fall, assuming a prepared spot is available. I have planted a few bushes at this time of the year and it seemed to me that

*Broad-leaved weeds — dandelion, plaitain, sorrel, clover — can be "done in" with preparations containing 2, 4D. However, great caution must be exercised in their use, for they can kill grass—not to mention desirable broad-leaved plants like trees and flowers—if incorrectly applied. They should be applied in clear, windless weather, exactly as the label directs.*



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they performed somewhat better than those planted the following spring. Plants from Eastern nurseries are often available now and might be considered as a means of getting some of the new varieties a little early. For example, the two roses winning the All America Rose Selection honors for 1964 are Granada and Saratoga. These are to be released to the market this fall but will not be available locally until next spring.

Granada is a very vigorous free-flowering hybrid tea originated by Howards of Hemet. It is a striking flame colored blend with good fragrance. It should be one of the most successful introductions of recent years. Although it has a tendency to mildew, it is otherwise trouble free and should be on everyone's shopping list. Saratoga is a pure white floribunda with hybrid tea shaped blooms. It is a Jackson and Perkins introduction and should be grown by everyone who wants a compact trouble-free floribunda. This is one of the very few good white floribundas. Both of these roses deserve the AARS accolade. I have grown Granada as a test rose and it has become one of my all-time favorites.

Donald A. Wilson  
*S. D. Rose Society*

## ● ORCHIDS

- \*Switch to low nitrogen
- \*Spike time is here
- \*Always beware of pests
- \*Lady slippers budding

**A**BOUT now you should be switching to a "low-nitrogen" plant food to promote flowering. A high nitrogen or balanced formula is applied after flowering, to promote vegetative growth. But at this time in the growing season we wish to encourage florescence. The first number in the series of three numbers that appears on all fertilizers represents nitrogen. Thus a 2-10-10 formula, such as "hi-bloom," is a "low-nitrogen" food. The plants should be fed this type of fertilizer every two weeks.

October is the "moment of truth," for bloom spikes should be appearing from now through December. Occasionally you will find a spike coming

from the pseudo-bulb that bloomed last year, but for the most part they will appear at the base of the new, green bulb. This is why it is so important that the new growth shoot should be fully developed by the end of August, when the growing season comes to an end. As I said before, the spike will be apparent at the base of the pseudo-bulb. It is usually dark in color and has a blunt, almost bullet-like, tip. It is useless to tell you not to go poking around looking for bloom spikes; few of us can resist the temptation. So be very careful in your search. The spikes are brittle and it would be a shame to have spent a whole year of diligent care only to snap off the spike in one foolish second. Don't count your spikes before they hatch.

It seems like there is always an excellent reason for pest control. Now you have to protect the spike you worked so hard to get. Slugs, snails and large chewing insects can completely devour a spike of cymbidiums. Small ones like red spider and aphids work their way inside the protective sheath and bite the tiny, undeveloped buds. When the time comes for the flower to open it may be malformed or just have unsightly pimples or holes. So get out the spray and keep working.

I suppose that now, when the most exciting part of cymbidium growing has come into flower, isn't the time to bring up the subject of other orchids that do well outdoors. I'm going to anyway. The "poor-man's orchid," the reed-epidendrum, is still going to town. They seem to be in bloom all year round. They like a good, rich soil—plenty of water and sun. The most common of the reed-epies is a brilliant red, but the color range is from white through pink, to deep purple, with yellow and orange thrown in for good measure. If you are doing well with the old red ones, why not invest a dollar or two and get one of these new hybrid epidendrums?

The cypripediums, lady-slippers, are starting to bud up now. They will come into bloom before the cymbidiums. They like a cool, shady, damp growing condition. I love the hybrid odontoglossums I have seen in the orchid shows and decided to give them a try. Cool and shady seems to do the trick. I wouldn't advise you try them unless you live on the coast where the summers stay cool. The first plant bloomed last month with a round, frilly apricot and white flower. That plant is putting up a nice new

growth now. A second plant has a one-inch spike so I should see the flowers in two or three month.

There are many other orchids that do well in our California patios. Sometime, if you are interested, I'll make up a list of these orchids. Let me know if you want it or are content to stick with the cymbidiums.

Betty Newkirk  
San Diego County Orchid Society

## ● CAMELLIAS

- \*Promise of color
- \*Wait until rain
- \*Humidity important
- \*Pick up the wilted

**A**NTICIPATION of good things to come are fast approaching as summer care has pushed the large, plump buds of the early-flowering varieties of camellias to a promise of October color.

General observation of dark, glossy green leaves, free of holes or chewed edges, if you have done your part in checking the pests, gives one a feeling of satisfaction in the challenge for success. Some sprays containing Lindane and Malathion would have insured your satisfaction.

Until the period when the rain takes over, regular and copious watering should be the order of the day for even moisture content is of utmost importance to perfectly develop the buds and flowers.

Humidity at flowering time has a great bearing on the successful opening of flowers, particularly the larger ones and those having many petals. A period of three to four days is required for full expansion. If a sudden drop in humidity occurs at this stage, the outer petals often dry or seal, giving the bud a glazed appearance known as "balling." Usually cool, humid days develop the finest blooms for us.

If interested in display blooms for shows for large, flowered varieties, spacing your branches a bit and attaching a clothes pin to keep in place always helps for perfection.

The practice of keeping the wilted and old flowers carefully picked up

usually pays off, not only in good appearance, but is a measure of sanitation that safeguards the possibility of "flower blight" which is prevalent in many sections of California and the southern states.

Harvey F. Short  
San Diego Camellia Society

## BOOK TOURS

Conducted by Alice Mary Greer

*Sierra Nevada Natural History:  
An Illustrated Handbook;* Tracy  
I. Storer & Robert L. Usinger.  
University of California Press,  
1963. \$4.95.

This handbook is written for those who wish to identify the common plants and animals of the Sierra Nevada, and to learn about their living habits. Although the subject matter relates mainly to inhabitants of the mountains, it includes some found in the western foothills and others on the east side.

There is a section dealing with the geology and other physical features of the region; one on plant distribution and environments, including a selection of fungi, lichens, ferns, wildflowers, shrubs, trees, but, regretfully, only examples of grasses, sedges and rushes. Would that we had a good book covering these last three classes! There are more than 750 descriptions of moths and butterflies. Seven chapters identify and describe animals, insects, fishes, amphibians, reptiles, birds, and mammals.

*Sunset Basic Gardening Illustrated.* Lane Publishing Co., Menlo Park, California, 1963. 125 pages. \$1.95.

Basic Gardening is intended as a fundamental guide for all gardeners, experienced and inexperienced. Steps are made clear by 900 photos and drawings. Soil, planting, irrigating, feeding, pruning, insecticides and weeds are phases handled. Much is crammed into one volume here, the print is small and interspersed with many plans, drawings and illustrations, so the format of the book is apt to be confusing and to lack the eye-appeal of some of the other Sunset soft-back books.



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## Affiliate Members 1963

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President: Mrs. Clayton Lee 296-4845  
3911 St. James Pl., S.D. 3  
Rep. Dir.: Mrs. Anuta Lynch 298-1400  
202 Lewis, S.D. 3

### ASTRO GARDEN CLUB

First Wednesday, Floral Bldg., 8 p.m.  
President: Arnold W. Carroll 276-1579  
1911 Erie St., S.D.  
Rep. Dir.: J. E. Henderson 274-1754  
3503 Yosemite, S.D. 9

### CIVIC CENTER GARDEN CLUB

Third Saturday, Floral Building, 10 a.m.  
President &  
Rep. Dir.: James Saraceno 274-2628  
3366 Lloyd St., S.D. 17

### CLASS OF SAN DIEGO BONSAI SOCIETY

Fourth Sunday, Floral Bldg., 1 p.m.  
Rep.: Crandall Condra 295-4920  
1212 Upas, S.D. 3

### CONVAIR GARDEN CLUB

Second Wed., Floral Building, 7:30 p.m.  
President: Henry Boyd 264-1283  
6581 Broadway, S.D. 14  
Rep. Dir.: Eugene Zimmerman 277-3383  
1942 Abbe, S.D. 11

### MEN'S GARDEN CLUB OF SAN DIEGO

COUNTY  
Fourth Monday, Floral Bldg., 7:30 p.m.  
Pres.: A. R. Blackburn 454-2507  
1640 Torrey Pines Rd., La Jolla  
Rep. Dir.: Roy C. Lawton 422-1775  
719 First Ave., Chula Vista

### MISSION GARDEN CLUB

Pres.: Mrs. Gilbert E. Marshall, 282-8468  
4364 Ohio St., S.D. 4  
Director: Mrs. E. R. Bohe 282-7422  
3145 No. Mt. View Drive, S.D. 16

### ORGANIC GARDENING CLUB

Third Friday, Floral Building, 7:30 p.m.  
President: Andrew Kerr 582-2499  
P.O. Box 362, Lemon Grove  
Rep. Dir.: Mrs. Hilkwitz 296-2282  
1756 Mission Cliffs Dr., S.D. 16

### POINT LOMA GARDEN CLUB

First Friday, Silver Gate Savings &  
Loan Bldg., Ocean Beach, 10:00 a.m.  
President: Mrs. Lind Davenport 222-4601  
4430 Longbranch, S.D. 7  
Vice-Pres. and Rep. Dir.:  
Mrs. Carl Leonhard 222-2702  
3014 Evergreen St., S.D. 6

### SAN DIEGO CACTUS & SUCCULENT SOCIETY

First Saturday, Floral Building, 2 p.m.  
President: Harry B. Caulk 295-8540  
3326 Union St., S.D.

### SAN DIEGO CAMELLIA SOCIETY

Second Friday, Floral Building, 7:30 p.m.  
Pres.: Mrs. Althea Hebert 466-3389  
8845 Country Club Pl., Spring Valley  
Rep. Dir.: Mrs. Lester Crowder 295-5871  
3130 Second St., S.D. 3

### S. D. CHAPTER CALIF. ASS'N NURSERYMEN

Fourth Thursday, 7:30 p.m.  
President: Frank Antonicelli 295-2808  
President: Charles Richards  
930 5th, Chula Vista  
6362 El Cajon Blvd., S.D. 15

### SAN DIEGO COUNTY DAHLIA SOCIETY

Fourth Tuesday, Floral Building, 7:30 p.m.  
Pres. & Rep. Dir.:

Mrs. R. M. Middleton 296-3246  
3944 Centre St., S.D. 3

### SAN DIEGO COUNTY ORCHID SOCIETY

First Tuesday, Floral Building, 8 p.m.  
Pres.: J. E. Henderson 274-1754  
3503 Yosemite, S.D. 9

Rep. Dir.: Elizabeth A. Newkirk

1654 La Mancha Dr., S.D. 9 274-2042

### SAN DIEGO FUCHSIA SOCIETY

Second Monday, Floral Building, 8 p.m.  
President: Mrs. Walter Bunker 281-5027  
4721 Bancroft, S.D.

Rep. Dir.: Mrs. Mary Bray Watson  
2337 Commonwealth, S.D. 4 284-2669

### SAN DIEGO ROSE SOCIETY

Third Monday, Floral Building, 8 p.m.  
President: Edwin Gould 454-1519  
7501 Olivetas Ave., La Jolla  
Rep. Dir.: Mrs. Joseph J. Kenneally  
2260 Catalina, S.D. 7 223-6183

## Other Garden Clubs

### AMERICAN BEGONIA SOCIETY

#### San Diego Branch

Fourth Monday, Barbour Hall, University  
& Pershing, 8 p.m.  
Pres.: Dr. Hazel McBride 295-1127  
2828 Dove St., S.D. 1

### San Miguel Branch

First Wednesday, Youth Center, Lemon  
Grove, 7:30 p.m.  
President: Mrs. Edward Hodgins 444-8477  
1729 Montgomery Rd., El Cajon

### CABRILLO-MISSION GARDEN CLUB

Third Thurs., United Church, 9:30 a.m.  
Pres.: Mrs. Chas. Domler 283-3642  
5158 Hastings Rd., S.D. 16

### CARLSBAD GARDEN CLUB

First Friday, VFW Hall, Carlsbad,  
1:30 p.m.  
Pres.: Mrs. Doris Simpson 729-1515  
1075 Chiquapin Ave., Carlsbad

### CHULA VISTA FUCHSIA CLUB

Second Tuesday, Norman Park Recreation  
Center, 7:30 p.m.  
Pres.: Mrs. William Hook 422-6322  
133 I, Chula Vista

### CHULA VISTA GARDEN CLUB

Third Wednesday, C.V. Woman's Club  
357 "G" St. 1:30 p.m.  
Pres.: Mrs. Lester J. Eiford 471-5379  
P.O. Box 357, Bonita

### CLAIREMONT GARDEN CLUB

Third Tuesday, Clairemont Community  
Center, 10 a.m.  
Pres.: Mrs. Charles Johnson 278-1043  
4804 Mount Durban, S.D.

### CORONADO FLORAL ASSOCIATION

No regular meeting date, Christ Church  
Parish Hall  
Pres.: Cmdr. Phillip H. Dennler 435-3337  
339 "B" Ave., Coronado

### CROSS-TOWN GARDEN CLUB

Third Monday, Barbour Hall, University  
& Pershing, 8 p.m.  
President: Charles Williams 284-2317  
4240 46th, S.D. 15

### CROWN GARDEN CLUB OF CORONADO

Fourth Thursday, Red Cross Bldg., 1113  
Adella Lane, 9:30 a.m.  
Pres.: Mrs. James P. Coleman 435-8602  
1020 Encino Row, Coronado, Calif.

### DELCADIA GARDEN CLUB

First Wednesday, Encinitas Union  
Elementary School, 7:30 p.m.  
Pres.: Mrs. Edwin C. Pickett 753-3890  
1068 Devenshire, Encinitas

### DOS VALLES GARDEN CLUB (PAUMA VLY.)

Second Tues., Members Homes, 1:30 p.m.  
Pres.: Mrs. J. C. Potter 745-0302  
Valley Center

### ESCONDIDO GARDEN CLUB

Third Fri., Women's Club House, 1:30 p.m.  
Pres.: Mrs. Leonard H. Cooper 744-0550  
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Lat Thurs., Fallbrook Woman's Club-  
house, 1:30 p.m.  
Pres.: Mrs. Elmyer Yocubets 728-2432  
1040 N. Orange, Fallbrook

### GROSSMONT GARDEN CENTER

Second Mon., Grossmont Center, 10 a.m.  
Pres.: Mrs. L. E. Elson 469-8009  
3451 Calavo Drive, Spring Valley

### IMPERIAL BEACH GARDEN CLUB

Third Tues., So. Bay Com. Center,  
1:30 p.m.  
Pres.: Mrs. Leonor Gish 424-7182  
630 Alabama, Imperial Beach

### LAKESIDE GARDEN CLUB

Third Monday, Lakeside Farm School,  
7:30 p.m.  
Pres.: Mrs. W. R. Kuhner 443-3163  
P. O. Box 561, Lakeside

### LA MESA WOMAN'S CLUB

(GARDEN SECTION)  
Third Thursday, La Mesa Woman's Club,  
1:45 p.m.  
Pres.: Mrs. J. Holland Noel 463-6795  
8415 Kappa St., La Mesa

### LEMON GROVE WOMAN'S CLUB

(GARDEN SECTION)  
First Tuesday, Lemon Grove Woman's  
Club House, 1 p.m.  
Chairman: Mrs. O. R. Patterson  
8396 Golden, Lemon Grove 466-5242

### NATIONAL CITY GARDEN CLUB

Third Wednesday, National City  
Community Bldg., 7:30 p.m.  
President: Henry Dell 284-7346  
4912 Mansfield, S. D. 16

### O. C. IT GROW GARDEN CLUB

Second Wednesday, S. Oceanside  
School Auditorium, 7:30 p.m.  
Pres.: Mrs. R. D. Chaney, Sr. 722-5748  
1411 Hunsaker St., Oceanside

### PACIFIC BEACH GARDEN CLUB

Second Monday, Home Federal  
Friendship Hall, 7:30 p.m.  
Pres.: Mrs. Ethel Hansen 273-3501  
3504 Ethan Allen, S.D. 17

### POWAY VALLEY GARDEN CLUB

Second Wed., 9:30 a.m. Members Homes  
Pres.: Mrs. Wm. C. Crojean 748-3464  
13821 Savage Way, Poway

### RANCHO SANTA FE GARDEN CLUB

Second Tuesday—Club House, 2:00 p.m.  
Pres.: Mrs. Neil J. Randol 756-1603  
Rancho Santa Fe

### SAN CARLOS GARDEN CLUB

Fourth Tues., Homes of Members, 1 p.m.  
Pres.: Mrs. Brandon J. Neal 465-2682  
6702 Jackson Dr., San Diego 19

### SAN DIEGUITO GARDEN CLUB

Third Wednesday, Seacoast Savings  
Building, Encinitas, 10 a.m.  
President: Mrs. Waldo Vogt 755-4772  
773 Barbara Ave., Solana Beach

### SANTA MARIA VALLEY GARDEN CLUB

Second Monday, Ramona Women's  
Club House, 5th and Main, 10 a.m.  
Pres.: Mrs. Nelson R. Brown 789-1034  
510 Fifth, Ramona

### SPRINGHOUSE GARDEN CLUB

Third Thursday, Porter Hall, Univ. &  
La Mesa, 7:30 p.m.  
President: Mr. R. M. Frodahl 469-1933  
3852 Avocado, La Mesa

### VISTA GARDEN CLUB

First Fri., Vista Rec. Center, 1:30 p.m.  
Pres.: Mrs. James Sorenson 724-1745  
1655 Foothill, Vista


# COVER STORY

Front Cover: One of the most beautiful sights in Ora Wilson's shade garden was the spectacular Stag Horn Fern. Alice M. Clark writes a tribute to Mrs. Wilson starting on page 17.

Back Cover: After California Garden began its plant tours of the San Diego Zoo, the spectacular Komodo Dragons were imported from Indonesia. In designing a fitting home for these rare reptiles, the Zoo placed the Dragon Tree, *Dracaena draco*, as suitable highlights. The final installment of the Zoo Tour series starts on Page Nine.

## WILDFLOWER CATALOG

1964-65 WILDFLOWER AND WILD TREE SEED CATALOG. Lists more than 700 of the best varieties, including 65 new, choice kinds, 50c. Scientific name—common name—bonsai section—artistic—fascinating—for the first time, trade secrets on germinating difficult seeds—no price increase—some decreases—a source and reference book of quality with permanent value. CLYDE ROBIN, P.O. Box 2091, Castro Valley, California.

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